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EXAMINER

TANG, KUO LIANG J

ART UNIT

PAPER NUMBER

2122

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/582,755

Applicant(s)

NACHEF ET AL.

Examiner

Kuo-Liang J Tang

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/12/2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. This Office Action is in response to the amendment filed on 02/12/2004.

Claims 7-27 are pending. Claims 26-27 are newly added.

Claims 7, 9, 11, 13, 15, 17, 19-20, 22-24 and 26-27 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter et al., US Patent No. 6,434,694 (hereinafter Slaughter) in view of Steadham, Jr. et al. US Patent No. 5,678,047 (hereinafter Steadham).

Claims 8, 10, 12, 14, 16, 18, 21 and 25 *remain* rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter in view of Steadham, further in view of Golshani et al. US Patent No. 5,678,047 (hereinafter Golshani).

Response to Arguments

Applicant's arguments with respect to claims 7-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 7, 9, 11, 13, 15, 17, 19-20, 22-24 and 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter et al., US Patent No. 6,434,694 (hereinafter Slaughter) in view of Steadham, Jr. et al. US Patent No. 5,678,047 (hereinafter Steadham).

As Per Claim 7, Slaughter disclosed:

-defining in an abstract class an abstract method for the function, the abstract method including parameters corresponding to a specific command. (see Column 6, Lines 27-37, “MainMemory 404 is an **abstract class** that includes with those attributes inherited from Memory 402 **abstract methods** for managing caching that are ultimately implemented in the instantiable classes PhysicalMemory 412, PortIOMemory 414, and VirtualMemory 416. The latter two classes inherit from MainMemory through the abstract class AccessibleMemory 410 that also inherits from MainMemory. Cache management methods are necessarily platform-specific; however, by using the abstract class MainMemory, those platform-specific memory management **functions** can be accessed in a platform independent manner.”).

-defining a common command that includes arbitrary symbols corresponding to parameters of the abstract method, (see Column 6, Lines 27-37, “MainMemory 404 is an **abstract class** that includes with those attributes inherited from Memory 402 **abstract methods** for managing caching that are ultimately implemented in the instantiable classes PhysicalMemory 412, PortIOMemory 414, and VirtualMemory 416. The latter two classes inherit from MainMemory through the abstract class AccessibleMemory 410 that also inherits from MainMemory. Cache management methods are necessarily platform-specific; however, by using the abstract class MainMemory, those platform-specific memory management **functions** can be accessed in a platform independent manner.”).

-creating at least one driver for implementing the abstract method in a machine. (see Column 6, Lines 28-40, “In one embodiment, AccessibleMemory contains only platform-independent methods and is passed from bus managers to **drivers**.”). *and*

-executing by the driver one of the specific commands with options equivalent to the options of the common command. (see Column 6, Lines 40-47, “Drivers also are configured to use only the platform-independent methods in MainMemory and Memory. The platform-specific methods in PhysicalMemory, PortIOMemory, VirtualMemory, and DMAMemory are used by the bus manager, which has platform-specific information, to allow the driver to access memory in a platform-independent manner as described below.”).

Slaughter discloses *defining in an abstract class an abstract method for the function, the abstract method including parameters corresponding to a specific command.* (see Column 6, Lines 27-37, “MainMemory 404 is an **abstract class** that includes with those attributes inherited from Memory 402 **abstract methods** for managing caching that are ultimately implemented in the instantiable classes PhysicalMemory 412, PortIOMemory 414, and VirtualMemory 416. The latter two classes inherit from MainMemory through the abstract class AccessibleMemory 410 that also inherits from MainMemory. Cache management methods are necessarily platform-specific; however, by using the abstract class MainMemory, those platform-specific memory management **functions** can be accessed in a platform independent manner.”). Slaughter does not explicitly disclose mapping the options of each specific command to the common command. However, Steadham teaches *defining in an abstract class an abstract method for the function, the abstract method including parameters corresponding to a union, in the logical sense, of all options of a specific command.* (E.g. see FIG. 19 step 1902, 1904,

Art Unit: 2122

1906 and associated text). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Steadham into the system of Slaughter, to map the options of each specific command to the common command. The modification would have been obvious because one of ordinary skill in the art would have been motivated so that when the Create or View/Exit options of the Drawing main menu selection are changed, the ACAD.LSP subroutine also defines several Lisp functions as well as determining whether or not the drawing is a FastAccess drawing (E.g. see col. 33:14-25).

As Per Claim 9, the rejection of claim 7 is incorporated and further Slaughter discloses *a driver corresponds to a machine of the computer system*. (see Column 6, Lines 28-40, "In one embodiment, AccessibleMemory contains only platform-independent methods and is passed from bus managers to **drivers**.").

As Per Claim 11, the rejection of claim 7 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 9.

As Per Claim 13, the rejection of claim 9 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 9.

As Per Claim 15, the rejection of claim 7 is incorporated and further Slaughter discloses *the abstract class contains at least some of the methods relating to functions of a functionality (F) common to the software products*. (see Column 4, Lines 61-63, "Runtime system 208

Art Unit: 2122

further includes a set of additional functions 212 that support facilities such as I/O, network operations, graphics, printing, and the like.”).

As Per Claim 17, the rejection of claim 9 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 15.

As Per Claim 19, the rejection of claim 11 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 15.

Claim 20 is the system claim corresponding to the method claim 7 and is rejected under the same reason set forth in connection of the rejection of claim 7.

As Per Claim 22, the rejection of claim 20 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 9.

As Per Claim 23, the rejection of claim 20 is incorporated and further Slaughter discloses *the abstract class is the most abstract class that can be defined*. (see Column 6, Lines 15-20, “Referring now to FIG. 4, the above-described hierarchy of abstract (non-instantiable) and instantiable memory classes and is illustrated in greater detail at 400. Hierarchy 400 is headed by Memory **abstract class** 402. This class includes only the general attributes of a Base Address, Length, and Constraints, each of which attributes are also objects.”).

Art Unit: 2122

As Per Claim 24, the rejection of claim 20 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 15.

As Per Claim 27, the rejection of claim 7 is incorporated and Slaughter does not explicitly disclose wherein the options are an argument that is capable of modifying the function of the specific command. However, Steadham teaches “wherein the options are an argument that is capable of modifying the function of the specific command” (E.g. FIG. 19 step 1904 and associated text, e.g. col. 33:26-31 which states “When the Create or View/Exit options of the Drawing main menu selection are changed, ... by using the select command with the R option.”). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Steadham into the system of Slaughter, so that options are an argument that is capable of modifying the function of the specific command. The modification would have been obvious because one of ordinary skill in the art would have been motivated so that user can easily select different options to perform different actions (executed by the specific commands).

Claim 26 is the method claim corresponding to the method claims 7 and 27 and is rejected under the same reason set forth in connection of the rejection of claim 7 and 27.

Art Unit: 2122

2. Claims 8, 10, 12, 14, 16, 18, 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slaughter in view of Steadham, further in view of Golshani et al. US Patent No. 5,678,047 (hereinafter Golshani).

As Per Claim 8, the rejection of claim 7 is incorporated and further the combination of Slaughter and Steadham do not explicitly disclose creating a configuration file. However, Golshani teaches *creating a configuration file (ConfigPrint) defining types and default values of the options of each specific command that can be executed by the driver, and determining parameters of one of said specific commands by consulting a configuration file by means of the common command.* (see Column 2, Lines 30-34, "U2G also provides on-line help screens and explain pages and simulates a semi-UNIX-like environment by providing facilities for using shell variables and aliases. U2G supports I/O redirection and simple command procedures, and simulates the piping of the **commands**. A **startup file**, "u2grc", is first interpreted at the start of any session to set up the appropriate environment."). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Golshani into the system of Slaughter modified by Steadham, to create a configuration file. The modification would have been obvious because one of ordinary skill in the art would have been motivated to provide for selective automatic invocation of the U2G translator program.

As Per Claim 10, the rejection of claim 8 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 9.

Art Unit: 2122

As Per Claim 12, the rejection of claim 8 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 9.

As Per Claim 14, the rejection of claim 10 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 9.

As Per Claim 16, the rejection of claim 8 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 15.

As Per Claim 18, the rejection of claim 10 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 15.

As Per Claim 21, the rejection of claim 20 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 8.

As Per Claim 25, the rejection of claim 23 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 11.

Art Unit: 2122

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuo-Liang J Tang whose telephone number is 703-305-4866.

The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q Dam can be reached on 703-305-4552.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9306.

Kuo-Liang J. Tang

Software Engineer Patent Examiner

Anthony Nguyen-Ba

**ANTONY NGUYEN-BA
PRIMARY EXAMINER**